

a first phase difference detecting circuit determining the phase difference between the first driving signal and the output of the first output device to adjust the phase delay of the first phase adjusting circuit for a delay time of the first output device; and

the second phase shifting circuit comprises:

a second output signal detecting circuit to detect an output of the second output device, and

a second phase difference detecting circuit determining the phase difference between the second driving signal and the output of the second output device to adjust the phase delay of the second phase adjusting circuit for a delay time of the second output device.

19. (NEW) A plasma display apparatus, comprising:

a plasma display panel equipped with first electrodes and second electrodes arranged adjacently to each other, extending in a first direction, and address electrodes extending in a second direction at a right angle to the first direction;

an X sustaining circuit that supplies sustaining pulses to said first electrodes using a first drive signal;

a Y sustaining circuit that supplies sustaining pulses to said second electrodes using a second driving signal, wherein said X and Y sustaining circuits respectively comprise:

a first phase adjusting circuit to adjust timing of a changing edge of a first driving signal, and outputting a first timing adjusted driving signal,

a second phase adjusting circuit to adjust timing of a changing edge of a second driving signal, and outputting a second timing adjusted driving signal,

a first output device turning on and turning off in response to the first timing adjusted driving signal, and provided between a path connected to said first electrode or said second electrode and a high potential power supply,

a second output device turning on and turning off in response to the second timing adjusted driving signal, and provided between the path connected to said first electrode or said second electrode and a low potential power supply, the first and second output devices producing and outputting the sustaining pulses by reciprocally and alternately turning on and turning off,

a power recovery circuit employing a capacitance of the plasma display panel to recover energy when a first application of the sustaining pulses occurs and to supply the recovered energy in a next application of the sustaining pulses,